SWOSU's Stein Receives Lightning Research Monies

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Dr. Tony Stein (center) will head a research endeavor on the SWOSU campus to investigate the characteristics of lightning flashes that produce Transient Luminous Events (TLE) in the middle atmosphere. Congratulating Stein on receiving the research award is Dr. Blake Sonobe, provost at SWOSU, and Anita Blankenship, director of the SWOSU Office of Sponsored Programs and Continuing Education.

Dr. Tony Stein, assistant professor in the Southwestern Oklahoma State University Chemistry and Physics Department, will head a research endeavor on the Weatherford campus to investigate the characteristics of lightning flashes that produce Transient Luminous Events (TLE) in the middle atmosphere.

The research is made possible by an award from the National Aeronautics and Space Administration Experimental Program to Stimulate Competitive Research (NASA EPSCoR) through a subaward agreement from the University of Oklahoma. They are partnering with SWOSU to provide grant funding in the amount of $45,000 over a three-year period. An additional $22,500 will be provided in the form of match funding to bring the total for the three-year project to $67,500.

A TLE observatory will be established in Weatherford and operated by SWOSU students under the direction of Dr. Stein. Partnered with the existing observatory at the University of Oklahoma, students will be able to study and record this and other mysterious lightning phenomena from multiple locations and in a wider variety of circumstances. Stein said these observational systems will provide new data on lightning and the electrical characteristics of the storms that produce lightning. Also, the proposed research will investigate techniques for using relationships between lightning flash rates and other storm properties to influence the character of storms produced by forecast models leading up to the forecast period.

Stein is the principal investigator for the subaward and will be working with Dr. William H. Beasley, professor of meteorology at OU.